PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference FR920020077/GIT	**FOR FURTHER ACTION**	See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)

International application No. PCT/EP 03/12055	International filing date *(day/month/year)* 02.10.2003	Priority date *(day/month/year)* 28.11.2002

International Patent Classification (IPC) or both national classification and IPC
G06F17/30

Applicant

INTERNATIONAL BUSINESS MACHINES CORPORATION

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 6 sheets, including this cover sheet.

   ☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

   These annexes consist of a total of   sheets.

3. This report contains indications relating to the following items:

   I ☒ Basis of the opinion

   II ☐ Priority

   III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

   IV ☐ Lack of unity of invention

   V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

   VI ☐ Certain documents cited

   VII ☐ Certain defects in the international application

   VIII ☐ Certain observations on the international application

Date of submission of the demand 09.03.2004	Date of completion of this report 23.11.2004
Name and mailing address of the international preliminary examining authority: European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized Officer Sanandrés Ledesma, J Telephone No. +49 89 2399-7569

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.   PCT/EP 03/12055

I. Basis of the report

1. With regard to the **elements** of the international application *(Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)):*

Description, Pages

1-19   as originally filed

Claims, Numbers

1-11   as originally filed

Drawings, Sheets

1/2-2/2   as originally filed

2. With regard to the **language,** all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).

☐ the language of publication of the international application (under Rule 48.3(b)).

☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

☐ the description,   pages:

☐ the claims,   Nos.:

☐ the drawings,   sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes:	Claims	1-11
	No:	Claims	
Inventive step (IS)	Yes:	Claims	
	No:	Claims	1-11
Industrial applicability (IA)	Yes:	Claims	1-11
	No:	Claims	

2. Citations and explanations

   see separate sheet

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1   Reference is made to the following documents:

D1:   ASHMAN H: "Theory and Practice of Large-Scale Hypermedia Systems" INTERNET ARTICLE. PHD. THESIS. ROYAL MELBOURNE INSTITUTE OF TECHNOLOGY, [Online] 1997, XP002285663 AUSTRALIA Retrieved from the Internet: URL:http://www.cs.nott.ac.uk/~hla/thesis/> [retrieved on 2004-06-21]

2   Novelty

2.1   The subject-matter of claims 1-11 appears to satisfy the criteria of novelty, as defined in Article 33(2) PCT.

3   Inventive Step

3.1   The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claims 1-11 does not involve an inventive step in the sense of Article 33(3) PCT.

3.2   The document **D1** is regarded as being the closest prior art to the subject-matter of claims 1, 3 and 8 and discloses (the references in parentheses applying to this document): A method for hyperlinking a target file to a main file by using externalised links, which are stored separately from the data they connect (see page 27, line 10). External links do not corrupt or change the format of the data, and are useful when links cannot be written into data (see page 30, lines 17-21) or when the hypermedia system cannot assume that it will be able to interpret or access the data in its original format (see page 37, lines 16, 17). There are two options for the storage of externalised links. The first option is to store the links in files or DBMS tables. The second option, the most relevant for the present application, is to store links as metadata information belonging to data (see page 45, line 35- page 46, line 2). The example of externalised links stored in metadata is based on Macintosh-platform files and the links are stored in a specific element of these files called resource fork (see page 47, lines 13-17).

3.3   The subject-matter of claims 1, 3 and 8 therefore differs from this known linking system in that: the links are attached to the filename, instead of using the resource fork. The effect of this difference is that it makes the links available to

platforms without resource fork in the files.

3.4   The problem to be solved by the present invention may therefore be regarded as the provision of an alternative way of storing externalised links in attached metadata.

3.5   The solution proposed in claim 1, 3 and 8 of the present application cannot be considered as involving an inventive step (Article 33(3) PCT) for the following reasons.

3.6   The person skilled in the art, a computer scientist with expertise in hypertext systems and file systems, would try to find an alternative solution because the D1 points out that the implementation depends on Macintosh specific features and this prevents the cross-platform portability (see page 47, lines 25-28). Hence, the skilled person would consider which kind of metadata is available for all platforms. This would lead him to the same solution of the present application because the only metadata that is available in all platforms is the filename. It is obvious that when the format of the links is not compatible with naming rules of the file systems, the linking information has to be transformed accordingly. But the implementation of these transformations is straightforward for the skilled person. And of course, the transformed linking information has to be restored when the user decides to follow the corresponding link. But, also the corresponding process for recovering the link is straightforward for the skilled person.

3.7   Therefore, the IPEA is of the opinion that the method for hyperlinking a file, claim 3, the method for activating a link, claim 8 and the file with the linking information attached to the filename, claim 1, are not inventive (Article 33(3) PCT).

3.8   Dependent claims 2, 4-7, and 9 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of inventive step, the reasons being as follows: the subject-matter of these claims is directed towards commonplace practices in the fields of file systems, hypertext systems and processing text strings.

4   Industrial applicability

4.1   The subject-matter of claims 1-11 seems to be industrially applicable, as required
      by Article 33(4) PCT.

5   Further comments

5.1   The IPEA would also like to mention for clarity reasons that the term control
      character, used in claims 1, 3 and 7 has a well known definition, namely an ASCII
      character with octal code 0 through 037, and also code 0177, and without graphic
      images assigned to it. The teaching of the application is in contradiction with this,
      because a control character in the application is some non-alphabetic character
      with a graphic image, like "(" or ".".